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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/547,281	04/12/2000	Hagen Schempf	99146	4983

7590 08/27/2003

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EXAMINER

HOOK, JAMES F

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 08/27/2003

101

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/547,281

Applicant(s)

SCHEMPF ET AL

Examiner

James F. Hook

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-21 and 23-85 is/are pending in the application.
- 4a) Of the above claim(s) 2-11, 21 and 23-72 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 77-84 is/are allowed.
- 6) ☒ Claim(s) 1, 12, 15-20 and 85 is/are rejected.
- 7) ☒ Claim(s) 14 and 73-76 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 18.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

It should be noted that the restriction requirement held in Paper 7, and the election made by applicant in Paper 12 still apply to the case which is an RCE, and the therefore the original election remains if it is not requested to change elected inventions with the paperwork of the RCE, where the arguments suggest that the originally elected claims are once again being elected for examination. Therefore claims 2-11, 21, and 23-72 remain non-elected and are removed from further consideration. However, it should be noted that allowable subject matter has been found in this application. Should applicant wish to place the remaining rejected claims in condition for allowance, it is requested that the non-elected claims either be amended appropriately if dependent from a generic claim to clear up any possible 112 errors that may have been created by placing other limitations into the generic claim, or by canceling any non-elected inventions which are not linked to the allowable claims by a generic claim to insure that the application is in complete condition for allowance upon filing of any amendment placing the remaining claims in condition for allowance. If applicant wishes to further argue the rejection, amendments to the non elected claims is not required at this time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 12, 15-20, and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smart (783) in view of Penza and Schempf. The patent to Smart discloses the recited multi-module pipe repair/inspection device comprising a base module 12, a module 13 which can be provided with stabilizers 40, a traction module 11 which can include a motor 20 to move the device, a microprocessor provided in the base module, sensors can be provided in various modules including a sensor module 14, and where all the modules are connected by flexible joints that have electrical connections so the modules can talk to one another. However, in column 1, lines 52-64, Smart discloses that the vehicle is made of a plurality of dissimilar individual modules linked by suspension modules in a modular arrangement, and in column 2, lines 14-29 describes that the electrical connections between modules is provided by the suspension modules and that connectors at each end allow electrical connection between all modules to be effected for power and intercommunication requirements. All of this language suggests that the modules connected by suspension modules which act as connectors between modules have connectors for the wires, which suggests that they are able to be detached at the connectors, otherwise it would be considered a waste to provide connectors for wires when they could be directly connected in a more permanent manner that would not come apart as easily as a connector. Therefore, it is considered that there is some suggestion in Smart that the modules can be taken apart even though such is not specifically disclosed. The patent to Smart discloses all of the recited structure with the exception of providing a brush module formed with a centrifugal spring biased inward array of brushes and a camera and forming the

connections to allow for detaching modules and thereby making them interchangeable. The patent to Penza discloses the recited pipe repair/inspection device comprising a brush module 2 which can be made of steel, and can comprise stabilizers and wheels 3, and a spinning brush head 250 that is provided with radially extending brushes in an array where the brushes are connected by springs to the body to hold the brushes out of contact with the pipe and when the body spins the centrifugal force overcomes the spring force allowing the brushes to contact the wall of the pipe, and where a camera or sensing device can be provided to monitor the pipe and various operations. It would have been obvious to one skilled in the art to modify the device in Smart by providing a brush module with a camera and spring biased brushes to allow for the cleaning away of debris inside the pipe and for inspecting the pipe as suggested by Penza. The patent to Schempf discloses a repair robot made of a plurality of modules where the modules can be held together in such a manner that they can be removably connected so they may be quickly and easily assembled in different arrangements which therefore is the equivalent of the modules being interchangeable (column 13, lines 5-11. It would have been obvious to one skilled in the art to modify the connection in Smart by forming it of a connection that can be disconnected to allow for interchanging the modules as suggested by Schempf as such will allow the apparatus to be used for various functions rather than limited to only one function.

Response to Arguments

Applicant's arguments with respect to claims 1, 12, 15-20, and 85 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 77-84 are allowed.

Claims 14 and 73-76 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

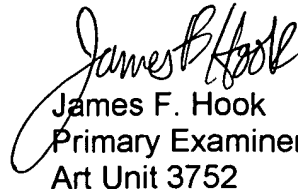
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Smart (371 and 795) and Stoves disclosing state of the art pipeline vehicles and suspension units for use therewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (703) 308-2913. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


James F. Hook
Primary Examiner
Art Unit 3752

JFH